

Sustainable returns: integrating advanced analytics tools in wealth and asset management



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1. Introduction

Extreme climate related-risks, acknowledged as top risks by the World Economic Forum, are poised to erode annual profitability by 10 to 15% until 2050.

As climate change continues to impact global economies and financial markets, we have seen a constant, ever-increasing and more complex wave of regulations with an impact on the financial services industry. In this new era, macroeconomic and geopolitical factors also pose a more immediate challenge to wealth and asset managers, who in this rapidly evolving landscape are quickly recognising the imperative of integrating climate risk considerations into their investment strategies and product offerings. It is no longer about the financial implications alone. It is about embracing a proactive stance that transcends profit margins. Extreme climate related-risks, acknowledged as top risks by the World Economic Forum, are poised to erode annual profitability by 10 to 15% until 2050. In addition, UBS also highlights in its 2024 Global Family Office Report¹ that "over a five-year horizon, they also view climate change as a top risk".

Climate risk is becoming increasingly prominent, with wealth and asset managers now facing growing pressure to demonstrate their strategies for assessing, adapting to and mitigating the impacts of climate change. This is prompting them to deliberate on the most suitable approach to quantify, assess and model climate risks for their specific business.

This paper dives into the profound impact of climate change on wealth and asset management, going beyond conventional financial concerns. We emphasise the necessity of integrating climate risk modelling as a key tool to meet client demands, enhance product offerings and uphold reputational credibility. Additionally, we provide an overview of various strategies currently employed by industry leaders and tools developed by PwC Switzerland. Instead of only considering climate risks as potential threats, we explore how they also present opportunities for proactive adaptation and growth.



¹ https://www.ubs.com/global/en/family-office-uhnw/reports/gfo-client-report-2024.html

Dissecting climate risk

For some considerable time, wealth and asset managers have been employing diverse modelling methods to evaluate risk profiles across numerous dimensions. Integrating such climate considerations into these techniques represents a crucial step towards constructing a more resilient future, safeguarding assets, resources, investments and personnel. In parallel, understanding climate risk exposure is also essential for companies to fulfil their reporting and disclosure obligations. In Switzerland, the Climate Ordinance implemented in January 2024 mandates businesses to report on climate-related matters in accordance with the guidelines provided by the Task Force on Climate-related Financial Disclosures (TCFD). On a global scale, within only a year there has been a near twofold increase in the number of entities endorsing the reporting of climaterelated risks and opportunities consistent with the TCFD guidelines. Close to 5,000 organisations in more than 100 jurisdictions have publicly expressed their endorsement of the TCFD's recommendations since the initial release of the report in 2017. The environmental factors now considered go beyond climate. Recently, nature-related risks have also become of significant importance, as highlighted by FINMA in its recent Circular on Nature-Related Risks.²

Wealth and asset managers looking to quantify climate risk should keep in mind that regulatory reporting standards such as the Swiss Climate Ordinance, the Responsible Business Initiative (RBI) and the European Sustainability Reporting Standards (ESRS) E1 mandate a broader analysis encompassing both the physical and transition risks of climate change.

Climate encompasses a range of factors, including physical risks stemming from extreme weather events, transition risks associated with policy changes and technological advancements and changing market conditions, as well as liability risks related to legal and reputational implications. Wealth and asset managers should have a clear understanding of the materiality of risks; they should also be able to justify both qualitatively and quantitively the impact of such risks on their portfolios. Wealth and asset managers must assess and mitigate these risks to protect their clients' investments and uphold their fiduciary responsibilities. The next chapter provides additional insights into the implications for players in the wealth and asset management industry.



Physical risks

Climate change-related extreme weather events and longer-term shifts in climate patterns that may have financial implications for companies.

Acute risks

Event-driven. extreme weather events, involving immediate and severe impacts from weather events such as hurricanes or floods.

Chronic risks

Longer-term shifts in climate patterns (e.g., sustained higher temperatures) that may cause sea level rise or chronic heat waves.

Transition risks

Financial risks associated with the viability of a business to transition to a lower-carbon economy from the current high carbon economy.

Policy and legal risks

Potential financial losses due to new climate policies, regulations, and litigation related to non-compliance with environmental laws or failure to adapt to regulatory changes.

Technology risks

Development and deployment of new technologies that could disrupt existina business models, making current technologies obsolete or leading to increased costs for adopting new technologies.

Market risks

Shifts in supply and demand for certain commodities, products, or services due to climate change or the transition to a sustainable economy.

Reputation risks

Damage to reputation or brand value due to perceptions of inadequate response to climate change, resulting in loss of customer trust, decreased investor confidence, or negative public perception.

Source: https://www.fsb.org/wp-content/uploads/P121023-2.pdf

² https://www.pwc.ch/en/insights/fs/finma-circular-on-nature-related-financial-risks.html

2. Implications for wealth and asset managers

Challenges and opportunities on the horizon

At PwC, we have identified certain challenges that wealth and asset managers consistently encounter when addressing climate risks. They include:

1. Dealing with the unexpected:

Climate risks are unlike anything seen before, a new and unprecedented type of risk that disrupts the existing risk taxonomies. Climate risks pose forward-looking challenges for wealth and asset managers, requiring them to think ahead and consider the long-term effects.

2. Lack of standardisation and regulatory uncertainty:

The constantly evolving landscape of regulatory frameworks around climate risk management adds another layer of complexity. Wealth and asset managers have to juggle different regulations in different jurisdictions, making it difficult to stay up to date with the latest requirements. Geopolitical considerations regarding regulatory uncertainty further complicate the landscape.

3. Tackling fragmented data:

The intricate nature of climate risk data, often complex and fragmented, makes it difficult for wealth and asset managers to integrate this information effectively into their investment strategies.

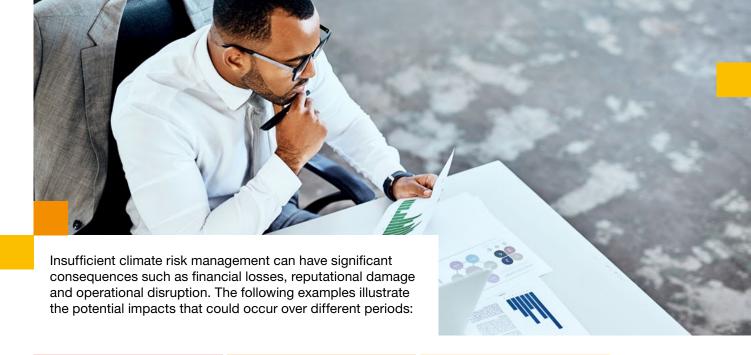
4. Meeting increasing client expectations:

Clients are demanding more transparency and accountability when it comes to climaterelated risks and opportunities. This puts pressure on wealth and asset managers to make sure climate issues are active components of their investment strategies.

5. Need for adaptive product offerings:

There is an increasing demand and need for financial products and instruments with a greater focus on climate risk considerations, enabling wealth and asset managers to effectively navigate the complexities of climate risk management and integrate climate-related factors into their investment decisions.











Financial losses

» Impact on credit risk, market risk, liquidity risk and operational risk

- » Fees and income at risk from selection of brown investments
- » Decline in net new money in the client portfolio
- » Underperformance of assets in certain sectors

Reputational damage

- » Reputational damage coming from any greenwashing
- » Disinvestments and loss of trust
- » Loss of brand recognition

Operational disruptions

- » Complex data requirements related to emissions of company and sector
- » Need of a redefined robust strategy aligned with the public commitments and use data for tracking such targets



Climate risk modelling: a fit-for-future approach with lucrative opportunities

In response to the challenges outlined above, climate risk modelling is a pivotal tool for assessing potential financial losses and mitigating negative impacts such as reputational damage. It also serves as a tool for evaluating opportunities arising from new financial product offerings. Climate risk modelling opens up a wider range of possibilities for wealth and asset managers, including:

- Enhanced decision-making: Climate risk modelling enables wealth and asset managers to make more informed investment decisions by quantifying the financial impacts of climate-related risks and opportunities across portfolios.
- 2. Tailored investment solutions: By incorporating climate risk modelling into their strategies, wealth and asset managers can offer tailored investment solutions aligned with clients' sustainability preferences and risk tolerance, enhancing satisfaction and retention.
- 3. Expanded product offering: Wealth and asset managers can use analytics tools for climate risk to develop enhanced financial products such as green bonds and sustainability-linked loans that cater to different market demands and capitalise on opportunities presented by climate-related trends, thereby broadening their product range and market appeal.
- 4. Reputational risk mitigation: Proactive climate risk modelling helps wealth and asset managers identify and mitigate potential reputational risks associated with investments in high-carbon or environmentally controversial industries, safeguarding their reputation and brand integrity.
- 5. Compliance: Climate risk modelling also helps wealth and asset managers measure and assess compliance with various regulatory standards and reporting requirements. By utilising appropriate metrics and calculations, they can ensure they meet the necessary guidelines and effectively communicate their efforts in managing climate risks to stakeholders and regulators.



Wealth and asset managers can use analytics tools for climate risk to develop enhanced financial products such as green bonds and sustainability-linked loans that cater to different market demands.

3. Benefits of an effective climate

risk modelling approach



Wealth and asset managers have the opportunity to revolutionise their risk management processes by exploiting the benefits of climate risk modelling and increasing client satisfaction with bespoke investment solutions. By incorporating climate risk modelling into existing frameworks they can precisely quantify the financial implications posed by climate-related risks on investment portfolios.

To quantify such risks, wealth and asset managers can conduct scenario analysis to assess the resilience of investment and client portfolios to various climaterelated scenarios. This allows them to develop robust risk mitigation strategies and adapt their product offerings. There are a number of benefits:

Sensitivity analysis: Climate scenario analysis enables wealth and asset managers to evaluate portfolio and product resilience against diverse climate-related scenarios and thus craft robust risk mitigation strategies.

- Opportunities for client-centric solutions:
 - By incorporating scenario analysis into investment strategies and product offerings, wealth and asset managers can provide tailored investment and product solutions that resonate with clients' sustainability preferences and risk appetite, increasing client satisfaction and loyalty.
- Proactive risk management: Proactively employing various scenarios aids in identifying and mitigating potential reputational risks associated with investments in high-carbon or environmentally controversial industries, ultimately safeguarding the reputation and brand integrity of wealth and asset managers.

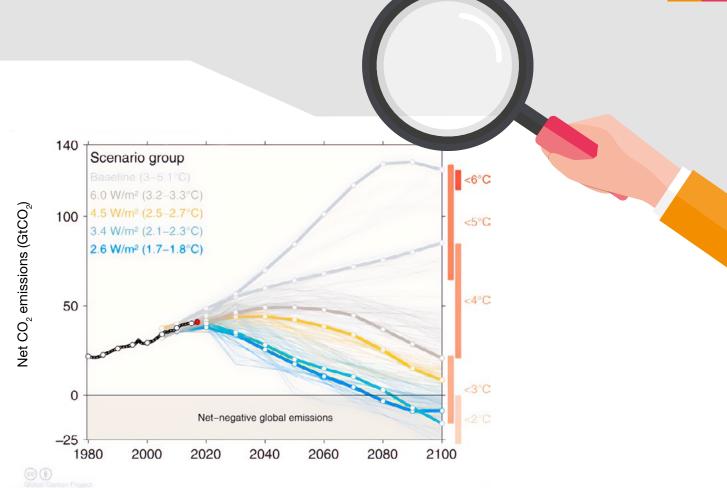
Overall, scenario analysis emerges as a crucial tool enabling wealth and asset managers to navigate the complexities of climate risk management, ensuring robust decision-making and mitigating the reputational risks.



A starting point for climate scenario analysis

The first step in a scenario analysis for climate risk modelling is to judiciously select an appropriate scenario. The Network for Greening the Financial System (NGFS) scenarios, widely recognised as the industry benchmark for climate risk modelling, are often the main choice. Drawn up collaboratively by central banks and financial supervisors, these scenarios are globally acclaimed for their robustness and comprehensiveness. The NGFS scenarios offer a standardised framework for evaluating climate-related risks, encompassing a spectrum of climate pathways and policy scenarios. While alternative scenarios from esteemed international bodies such as the International Energy Agency (IEA) and the Intergovernmental Panel on Climate Change (IPCC), as well as industry-specific initiatives, also exist, it's noteworthy that NGFS scenarios are particularly aligned with the specific requirements of the financial services sector.

Tailored to address both physical and transition risks, the NGFS scenarios provide wealth and asset managers with a panoramic view of potential impacts on investment portfolios. Moreover, the widespread adoption of NGFS scenarios by central banks and financial institutions ensures consistency and comparability across different jurisdictions, making them a reliable choice for climate risk modelling.



Source: Impacts of abiotic stresses on the physiology and metabolism of cool-season grasses: A review - Scientific Figure on ResearchGate. Available from: https://www.researchgate.net/figure/Predictions-of-emissions-from-fossil-fuels-and-land-use-change-GtCO2-year-according-to_ fig1_328139725 [accessed 29 May, 2024]



Use cases: climate risk in action

An interesting use case comes from the European Central Bank (ECB), which conducts climate stress test exercises to assess the resilience of banks to climaterelated risks. These exercises involve simulating various climate scenarios such as different temperature rise trajectories or extreme weather events and assessing their impact on banks' balance sheets and profitability. The ECB's climate stress tests also evaluate banks' exposure to carbon-intensive sectors and their ability to manage potential losses associated with the transition to a low-carbon economy.

Similarly, the Bank of England conducts climate stress test exercises as part of its regular supervisory activities. These exercises assess the resilience of financial institutions to climate-related risks, including physical risks such as property damage from extreme weather events and transition risks such as changes in asset valuations due to shifts in climate policies. By conducting these

stress tests, central banks and financial supervisors aim to ensure that banks, wealth and asset managers are adequately prepared to manage the risks associated with climate change and contribute to the transition to a more sustainable economy.

In addition to the two exercises mentioned above, the Swiss Financial Market Supervisory Authority (FINMA) has also introduced requirements related to scenario analysis through its Circular on Nature-related Financial Risks.

FINMA's circulars on risk management for banks and insurance companies include provisions mandating the use of scenario analysis to assess and manage climaterelated risks. They require financial institutions to develop and implement scenario analysis frameworks that enable them to evaluate the potential impacts of climate change on their business activities, portfolios and risk profiles.

4. Burning issues

for your C-suite

While climate risk disclosures often drive the sustainability agenda, pioneering wealth and asset managers are additionally using climate risk modelling as part of their broader sustainability toolkit to drive strategic decision-making. It is still crucial to identify and capitalise on risks and opportunities. This evolutionary process demands proactive measures, and PwC can help you with a roadmap to navigate it.

Key actions

For the chief executive officer (CEO):

Understand and navigate the evolving regulatory landscapes and exceed stakeholder expectations.

- Craft a robust strategy for comprehensively assessing and transparently communicating climate-related risks and opportunities to internal and external stakeholders.
- For the chief risk officer (CRO): Conduct rigorous qualitative and quantitative risk assessments to

pinpoint strategic business risks and opportunities.

- Explore a diverse array of data sources, cutting-edge tools and experts to conduct such quantitative scenario analysis.
- For the chief financial officer (CFO):

4

Embark on a decisive journey towards resilience with a meticulously planned roadmap, compelling business case and strategic funding

- 6 Enhance monitoring and oversight of the potential future environmental impacts of financial performance by pre-emptively strategising for climate-related risks and opportunities.
- For the chief sustainability officer (CSO):

Realise that accountability is not just about meeting regulatory requirements and ensure that the firm's commitment to sustainability goes above and beyond.

- Transform sustainability efforts into a profit-generating centre, turning 8 what was once seen as a cost centre into a source of revenue and competitive advantage
- Use ESG to set your organisation apart in the market, leveraging such factors as a market differentiator to attract investors and consumers.
- Drive innovative investment strategies aligned with ESG principles, identifying and capitalising on investment opportunities that generate both financial returns and positive environmental and social outcomes.



Deriving value from climate risk modelling

In conclusion, climate risk modelling is indispensable for wealth and asset managers seeking to meet client expectations, expand their product offering, enhance their investment approaches, mitigate reputational risk and ensure long-term financial resilience in an increasingly climate-driven world. By embracing climate risk modelling as a core component of their investment and decision processes, wealth and asset managers can deliver value-driven investment solutions that resonate with clients and uphold their fiduciary duties.



At PwC Switzerland we have amassed extensive knowledge and developed tools that we've already used at all stages of the journey, from conducting in-depth reviews of the as-is situation to implementing solutions for wealth and asset managers. Those solutions are revisable, audit-proof and transparent for you and your C-suite, ensuring full transparency.







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